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# **Legal and Safety Information**

**CAUTION:** NO LIABILITY IS ASSUMED FOR ANY DAMAGE CAUSED BY IMPROPER INSTALLATION.

### **Notice on Software**

SOFTWARE USED WITH THIS PRINTER MUST SUPPORT THE PRINTER'S EMULATION MODE. The printer is factory-set to emulate the PCL. The emulation mode can be changed.

#### **Notice**

The information in this guide is subject to change without notification. Additional pages may be inserted in future editions. The user is asked to excuse any technical inaccuracies or typographical errors in the present edition.

No responsibility is assumed if accidents occur while the user is following the instructions in this guide. No responsibility is assumed for defects in the printer's firmware (contents of its read-only memory).

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This product uses PeerlessPrintXL to provide the HP LaserJet compatible PCL 6 language emulation. PeerlessPrintXL is a trademark of Peerless Systems Corporation, 2381 Rosecrans Ave. El Segundo, CA 90245, U.S.A.

This product was developed using the Tornado™ Real Time Operating System and Tools from Wind River Systems.

This product contains UFST™ and MicroType® from Monotype Imaging Inc.

## **USB**



This product has been certified by the USB Implementers Forum, Inc.

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# **Compliance and Conformity**

### FCC Statement (for users in the United States)

This device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules.

Operation is subject to the following two conditions; (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no

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guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that used for the receiver.
- Consult your service technician or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the manufacturer for compliance could void the user's authority to operate the equipment. Shielded circular cables should be used for interfacing with the computer.

#### **Precautions for Use**

Any modifications without prior permission of Kyocera may cause harmful interference.

If any modifications or changes are made to this equipment without prior permission of Kyocera, Kyocera as the manufacturer does not guarantee the compliance with the FCC Rules. The use of equipment that does not comply with the FCC Rules is prohibited.

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# **Safety Information**

# **Laser Safety**

This printer is certified as a Class 1 laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to Radiation Control for Health and Safety Act of 1968. This means that the printer does not produce hazardous laser radiation. Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape from the printer during any phase of user operation.

### **Laser Notice**

This printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter for Class I (1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

**DANGER:** CLASS 3B LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

# **Radio Frequency Transmitter**

This machine contains the transmitter module. We, the manufacturer (Kyocera Corporation) hereby declare that this equipment (page printer), models FS-2000D/FS-3900DN/FS-4000DN are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

## **Radio Tag Technology**

In some countries the radio tag technology used in this equipment to identify the toner container may be subject to authorization and the use of this equipment may consequently be restricted.

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# **Declaration of Conformity for U.S.A.**

Model name: Page Printer FS-2000D/FS-3900DN/FS-4000DN

Trade name: Kyocera Mita

Responsible party: Kyocera Mita America, Inc.

Address: 225 Sand Road PO Box 40008 Fairfield, New Jersey 07004-

0008, U.S.A.

Telephone: (973) 808-8444 Fax: (973) 882-6000

Manufacturer: Kyocera Mita Corporation Tamaki Plant

Manufacturer's address: 704-19, Nojino, Tamaki-cho, Watarai-gun, Mie-

ken 519-0497, Japan

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned.

User's instruction that conforms to the applicable specifications. Technical drawings.

Descriptions of the procedures that guarantee the conformity. Other technical information.

Kyocera Mita America Inc.

# **CE Marking Directive**

According to Council Directive 89/336/EEC, 73/23/EEC, and 1999/5/EC

Manufacturer: Kyocera Mita Corporation Tamaki Plant

Manufacturer's address: 704-19, Nojino, Tamaki-cho, Watarai-gun, Mie-

ken 519-0497, Japan

Declares that the product

Product name: Page Printer

Model number: FS-2000D/FS-3900DN/FS-4000DN (as tested with enhancement optional unit; Paper Feeder PF-310)

Conforms to the following product specifications:

EN 55 022:1998+A1:2000+A2:2003 Class B

EN 61 000-3-2:2000

EN 61 000-3-3:1995+A1:2001

EN 55 024:1998+A1:2001+A2:2003

EN 60 950:2000

EN 60 825-1:1994+A1+A2

EN 300330-1

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#### EN 300330-2

The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned.

User's instruction that conforms to the applicable specifications. Technical drawings.

Descriptions of procedures that guarantee conformity.

Other technical information.

# **Declaration of Conformity (Australia)**

Manufacturer: Kyocera Mita Corporation Tamaki Plant

Manufacturer's address: 704-19, Nojino, Tamaki-cho, Watarai-gun, Mie-

ken 519-0497, Japan

declares that the product

Product name: Page Printer

Model name: FS-2000D/FS-3900DN/FS-4000DN

Description of devices: This Page Printer Model FS-4000DN is the 45ppm (FS-2000D is the 30ppm, FS-3900DN is the 35ppm); A4 size and utilized plain paper; dry toner; etc. The printer can be equipped with several enhancement optional units as a paper feeder as PF-310.

conforms to the following product specifications:

AS/NZS 3548: 1995 (EN 55 022: 1998 Class B)

AS/NZS 4268: 2003

IEC60950: 1999 (EN 60 950: 2000)

The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned.

User's instruction that conforms to the applicable specifications Technical drawings

Descriptions of procedures that guarantee conformity Other technical information

The manufacturer has been employed with ISO9001 scheme. JQA and BS have attested the manufacturer.

Kyocera Mita Australia Pty., Ltd. 6-10 Talavera Road, North Ryde, NSW 2113, Australia

Telephone: +61 2-9888-9999

Fax: +61 2-9888-9588

# **Canadian Department of Communications Compliance Statement**

This Class B digital apparatus complies with Canadian ICES-003.

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# Avis de conformité aux normes du ministere des Communications du Canada

Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

#### **ISO 7779**

Maschinenlärminformations-Verordnung 3. GPSGV: Der höchste Schalldruckpegel beträgt 70 dB (A) oder weniger gemäß EN ISO 7779.

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# **Energy Star Program**



As an Energy Star Partner, we have determined that this product meets the Energy Star guidelines for energy efficiency.

The basic objective of the Energy Star Program is to reduce environmental pollution by encouraging the manufacture and sale of equipment that uses energy more efficiently.

This printer is equipped with a sleep timer function that conforms with the standards of the Energy Star Program. This function makes it possible to reduce the amount of electrical power consumed by the printer. For maximum power savings, turn off the printer's power supply when not using the printer for extended periods of time.

For details on the sleep timer function and printer power consumption, refer to this manual.

Initial settings of the sleep timer function and power saved using the sleep timer function:

	FS-2000D	FS-3900DN	FS-4000DN
Initial Auto Sleep Setting	15 minutes (60 minutes)	15 minutes (60 minutes)	15 minutes (60 minutes)
Power Consumption in Auto Sleep	4.4W (30W)	4.9W (40W)	5.5W (75W)

(): ENERGY STAR program guideline

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# **Group for Energy Efficient Appliances (GEEA)**



The goal of GEEA is efficient use of energy. This product has a high-efficiency profile and meets the criteria for receiving the GEEA-Label.

	FS-2000D	FS-3900DN	FS-4000DN
Initial Auto Sleep Setting	15 minutes (60 minutes)	15 minutes (60 minutes)	15 minutes (60 minutes)
Power Consumption - Power off - Auto Sleep	0W (1W) 4.4W (15W)	0W (1W) 4.9W (15W)	0W (1W) 5.5W (15W)

(): GEEA criteria

# Please read this Operation Guide before using the machine. Keep it close to the machine for easy reference.

The sections of this guide and parts of the machine marked with symbols are safety warnings meant to protect the user, other individuals and surrounding objects, and ensure correct and safe usage of the machine. The symbols and their meanings are indicated below.



**DANGER**: Indicates that serious injury or even death will very possibly result from insufficient attention to or incorrect compliance with the related points.



**WARNING**: Indicates that serious injury or even death may result from insufficient attention to or incorrect compliance with the related points.



**CAUTION**: Indicates that personal injury or mechanical damage may result from insufficient attention to or incorrect compliance with the related points.

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# **Symbols**

The following symbols indicate that the related section includes safety warnings. Specific points of attention are indicated inside the symbol.



.... [General warning]



... [Warning of danger of electrical shock]



... [Warning of high temperature]

The following symbols indicate that the related section includes information on prohibited actions. Specifics of the prohibited action are indicated inside the symbol.



.. [Warning of prohibited action]



.. [Disassembly prohibited]

The following symbols indicate that the related section includes information on actions which must be performed. Specifics of the required action are indicated inside the symbol.



.... [Alert of required action]



.. [Remove the power plug from the outlet]



[Always connect the machine to an outlet with a ground connection]

Please contact your service representative to order a replacement if the safety warnings in this Operation Guide are illegible or if the guide itself is missing. (fee required)

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## **Installation Precautions**

#### **Environment**

# **CAUTION:**

Avoid placing the machine on or in locations which are unstable or not level. Such locations may cause the machine to fall down or fall over. This type of situation presents a danger of personal injury or damage to the machine.

Avoid locations with humidity or dust and dirt. If dust or dirt become attached to the power plug, clean the plug to avoid the danger of fire or electrical shock.

Avoid locations near radiators, heaters, or other heat sources, or locations near flammable items, to avoid the danger of fire.

To keep the machine cool and facilitate changing of parts and maintenance, allow access space as shown below. Leave adequate space, shous5(hpecie, yich aro plunding the)ventug t, al5o(ch)4(i)(ug b(the))

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- Avoid locations with vibrations.
- Avoid locations with drastic temperature fluctuations.
- Avoid locations with direct exposure to hot or cold air.
- Avoid poorly ventilated locations.

During printing, some ozone is released, but the amount does not cause any ill effect to one's health. If, however, the printer is used over a long period of time in a poorly ventilated room or when printing an extremely large number of copies, the smell may become unpleasant. To maintain the appropriate environment for print work, it is suggested that the room be properly ventilated.

# **Power Supply/Grounding the Machine**



#### **WARNING:**

Do not use a power supply with a voltage other than that specified. Avoid multiple connections in the same outlet. These types of situations present a danger of fire or electrical shock.



Plug the power cord securely into the outlet. If metallic objects come in contact with the prongs on the plug, it may cause a fire or electric shock.



Always connect the machine to an outlet with a ground connection to avoid the danger of fire or electrical shock in case of an electric short. If an earth connection is not possible, contact your service representative.



#### **Other Precautions**

Connect the power plug to the closest outlet possible to the machine.

The power supply cord is used as the main disconnect device. Ensure that the socket/outlet is located/installed near the equipment and is easily accessible.

# **Handling of Plastic Bags**



#### WARNING

Keep the plastic bags that are used with the machine away from children. The plastic may cling to their nose and mouth causing suffocation.



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# **Precautions for Use**

# **Cautions when Using the Machine**



#### **WARNING:**

Do not place metallic objects or containers with water (flower vases, flower pots, cups, etc.) on or near the machine. This situation presents a danger of fire or electrical shock should they fall inside.



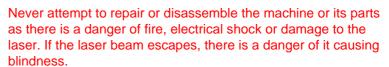
Do not remove any of the covers from the machine as there is a danger of electrical shock from high voltage parts inside the machine.



Do not damage, break or attempt to repair the power cord. Do not place heavy objects on the cord, pull it, bend it unnecessarily or cause any other type of damage.



These types of situations present a danger of fire or electrical shock.





If the machine becomes excessively hot, smoke appears from the machine, there is an odd smell, or any other abnormal situation occurs, there is a danger of fire or electrical shock. Turn the power switch off (O) immediately, be absolutely certain to remove the power plug from the outlet and then contact your service representative.



If anything harmful (paper clips, water, other fluids, etc.) falls into the machine, turn the power switch off (O) immediately. Next, be absolutely certain to remove the power plug from the outlet to avoid the danger of fire or electrical shock. Then contact your service representative.



Do not remove or connect the power plug with wet hands, as there is a danger of electrical shock.



Always contact your service representative for maintenance or repair of internal parts.



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Do not pull the power cord when removing it from the outlet. If the power cord is pulled, the wires may become broken and there is a danger of fire or electrical shock. (Always grasp the power plug when removing the power cord from the outlet.)

Always remove the power plug from the outlet when moving the machine. If the power cord is damaged, there is a danger of fire or electrical shock.



If the machine will not be used for a short period of time (overnight, etc.), turn the power switch off (O). If it will not be used for an extended period of time (vacations, etc.), remove the power plug from the outlet for safety purposes during the time the machine is not in use.



Always hold the designated parts when lifting or moving the machine.



For safety purposes, always remove the power plug from the outlet when performing cleaning operations.



If dust accumulates within the machine, there is a danger of fire or other trouble. It is therefore recommended that you consult with your service representative in regard to cleaning of internal parts. This is particularly effective if accomplished prior to seasons of high humidity. Consult with your service representative in regard to the cost of cleaning the internal parts of the machine.

#### **Other Precautions**

Do not place heavy objects on the machine or cause other damage to the machine.

Do not open the upper front cover, turn off the power switch, or pull out the power plug during copying.

When lifting or moving the machine, contact your service representative.

Do not touch electrical parts, such as connectors or printed circuit boards. They could be damaged by static electricity.

Do not attempt to perform any operations not explained in this handbook.

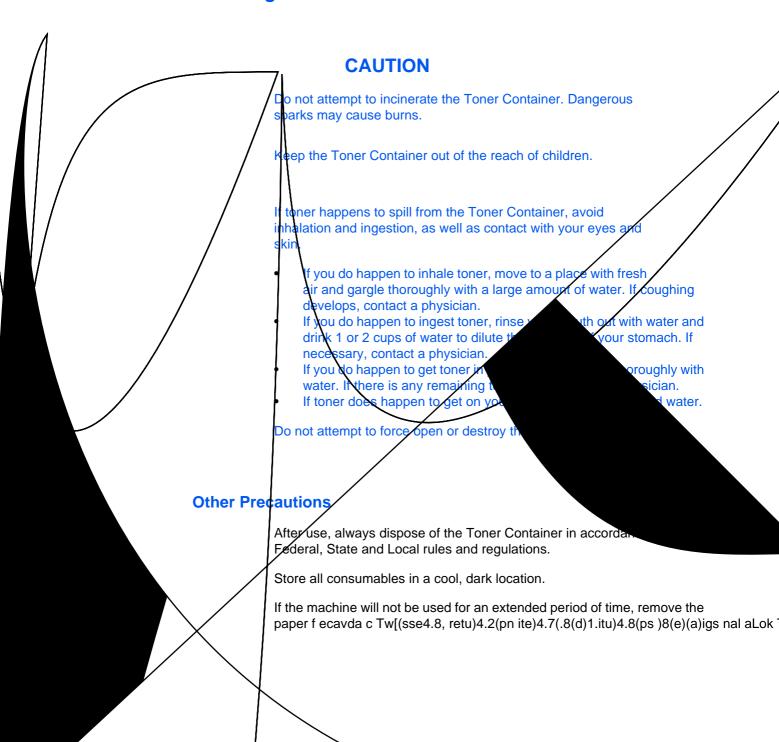
Use shielded interface cables.

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### **CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

# **Cautions when Handling Consumables**



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# **About the Operation Guide**

This Operation Guide has the following chapters:

Chapter 1 - Machine Parts

This chapter explains the names of parts.

Chapter 2 - Printing Operation

This chapter explains how to print from your workstation.

Chapter 3 - Maintenance

This chapter explains how to replace the toner container and how to care for your printer.

Chapter 4 - Troubleshooting

This chapter explains how to handle printer problems that may occur, such as paper jams.

Chapter 5 - Specifications

This chapter lists the printer's specifications.

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# **Conventions**

This manual uses the following conventions.

Convention	Description	Example
Italic Typeface	Used to emphasize a key word, phrase or references to additional information.	Close the top cover. Refer to Toner Container Replacement on page 3-3.
Courier Typeface	Used to denote messages or names displayed on the operation panel.	Replace the waste toner box when the Check waste toner box message is displayed.
Bold Typeface	Used to denote operation panel keys.	Press [Menu].
Notes	Used to provide additional or useful information about a function or feature.	NOTE: For information about storing the pin, refer to step 10.
Important	Use to provide important information.	IMPORTANT: Ensure paper is not folded, curled, or damaged.
Caution	Cautions are statements that suggest <i>mechanical</i> damage as a result of an action.	CAUTION: Do not pull the cassette out when holding the front of the machine.
Warning	Used to alert users to the possibility of <i>personal</i> injury.	<b>WARNING:</b> High voltage is present in the charger section.

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# 1 Machine Parts

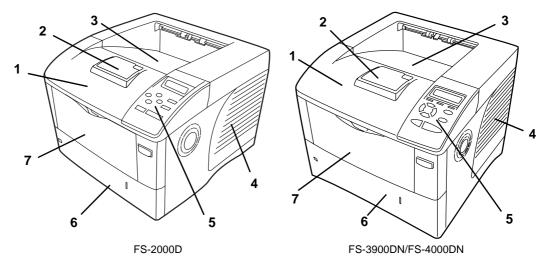
This section provides explanations and illustrations for you to determine the parts and their functions. Try to be familiar with the names and functions of these parts for correct use and optimal performance.

This chapter contains explanations on the following topics:

•	Components at the Front of the Printer	. 1-2
•	Components at the Left of the Printer and Internal	
	Components	. 1-2
•	Components at the Rear of the Printer	. 1-3

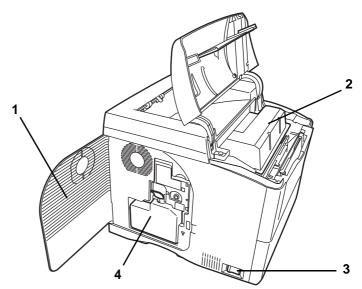
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# **Components at the Front of the Printer**



- 1 Top Cover
- 2 Paper Stopper
- 3 Top Tray
- 4 Right Cover
- 5 Operation Panel
- 6 Paper Cassette
- 7 MP (Multi-Purpose) Tray

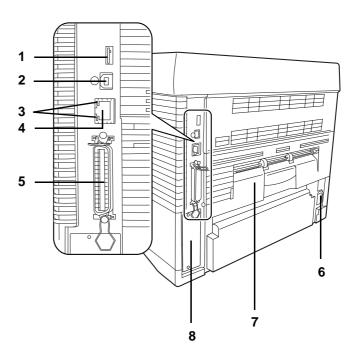
# **Components at the Left of the Printer and Internal Components**



- 1 Left Cover
- 2 Toner Container
- 3 Power Switch
- 4 Waste Toner Box

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# **Components at the Rear of the Printer**



- 1 USB Memory Slot
- 2 USB Interface Connector
- 3 Network indicators (FS-3900DN/FS-4000DN only)
- 4 Network Interface Connector (FS-3900DN/FS-4000DN only)
- 5 Parallel Interface Connector
- **6** Power Cord Connector
- 7 Rear Unit
- 8 Option Interface Slot (Network/Serial/CF card/Microdrive)

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# **2 Printing Operation**

This chapter contains explanations on the following topics:

Loading Printer Driver	2-2
Printing from Application Software	2-3

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# **Loading Printer Driver**

Ensure the printer is plugged in and connected to the PC before installing the printer driver from the CD-ROM.

1 Switch on the PC and activate Windows.

**NOTE:** If the Welcome to the Found New Hardware Wizard dialog box displays, select Cancel.

- 2 Insert the CD-ROM supplied with the printer into the optical drive of the PC.
- 3 The installation program launches.

**NOTE:** If the installation program fails to launch, use Windows Explorer to access the CD-ROM and select Setup.exe.

4 Perform the procedures displayed on the installation program to install the KX DRIVER.

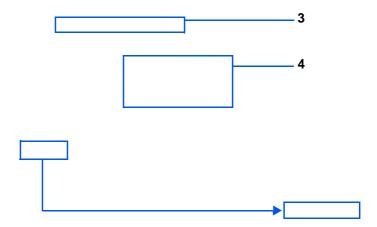
2-2 OPERATION GUIDE

# **Printing from Application Software**

The steps required to print a document created with an application are explained below. You can select the printing *Paper Size* and *Output Destination*.

- 1 Load the paper required into the paper cassette.
- **7** From the application *File* menu, select **Print**. The *Print* dialog box displays.
- 3 Click the drop down list of printer names. All the printers installed in Windows are listed. Click the name of the machine.
- 4 Use **Number of copies** to enter the number of prints required. Up to 999 copies can be entered.

For Microsoft Word, we recommend that you click **Options** and specify **Use printer settings** for the **Default tray**.



5 To start printing, click OK.

OPERATION GUIDE 2-3

2-4 OPERATION GUIDE

# 3 Maintenance

This chapter contains explanations on the following topics:

•	General Information	3-2
•	Toner Container Replacement	3-3
•	Cleaning the Printer	3-8

OPERATION GUIDE 3-1

# **General Information**

This chapter describes basic maintenance tasks you can perform on the printer. You can replace the following component according to the printer's display:

- Toner Kits
- Waste Toner Box

Also, the internal parts need periodic cleaning.

3-2 OPERATION GUIDE

# **Toner Container Replacement**

#### Frequency of toner container replacement

The life of the toner containers depends on the amount of toner required to accomplish your printing jobs. Assuming paper of A4 size, an average toner coverage of apporoximatelly 5% and EcoPrint mode turned off, the toner container will need replacing apporoximately once every 20,000 pages (FS-4000DN); 15,000 pages (FS-3900DN); 12,000 pages (FS-2000D).

You can print a status page to check how much toner remains in the toner container. The Toner Gauge in the consumables status section on the status page shows a progress bar, which roughly represents how much toner is left in the toner container.

#### **Starter Toner Container**

The toner container packed with the new printer is a starter toner container. The starter toner container lasts an average of 10,000 pages (FS-4000DN); 7,500 pages (FS-3900DN); 6,000 pages (FS-2000D).

#### **Toner Kits**

For best results, we recommend that you only use genuine Kyocera Parts and Supplies.

A new toner kit contains the following items:

- Toner Container
- Cleaning cloth
- Plastic waste bags for old toner container and old waste toner box
- · Waste toner box
- Installation Guide

**NOTE:** Do not remove the toner container from the carton until you are ready to install it in the printer.

# **Understanding Messages Requesting Toner Container Replacement**

The printer displays messages at two stages of toner usage. This message is automatically alternated with the other printer message (such as Ready):

- When the printer becomes low on toner, the printer displays the message Toner low as the first caution. Note the replacement is not always necessary at this stage.
- If you ignore the above message and continue printing, the printer
  displays the message Replace toner just before the toner is
  used up. The toner container must be replaced immediately. After the
  cleaning is finished, however, the message does not automatically

change to  ${\tt Ready}.$  To restart printing, you must press <code>[GO]</code> and make the printer ready.

In either case, replace the toner container, refer to *Toner Container Replacement on page 3-3*.

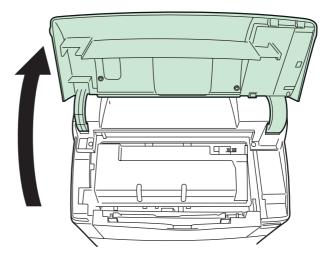
# **Replacing the Toner Container**

**NOTE:** During toner container replacement, temporarily put storage media and computer supplies (such as floppy disks) away from around the toner container. This is to avoid damaging media by the magnetism of toner.

This section explains how to replace the toner container. When replacing the toner container, always replace the waste toner box at the same time. If this box is full, the printer may be damaged or contaminated by the waste toner that may spill over the box.

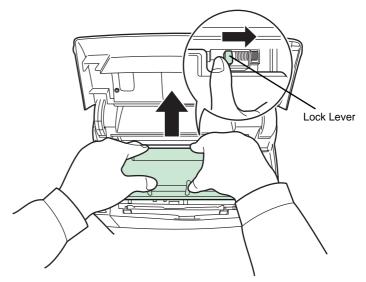
**NOTE:** You do not have to turn printer power off before starting the replacement. Any data that may be under printing process in the printer will be deleted if you turn printer power off.

Open the top cover.

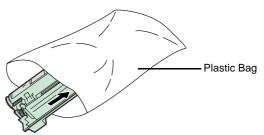


3-4 OPERATION GUIDE

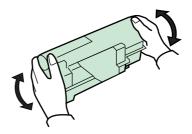
Push lock lever to the right and pull out the toner container.



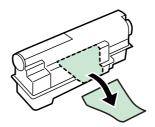
3 Put the old toner container in the plastic bag (contained in the toner kit) and discard it later according to the local code or regulations for waste disposal.



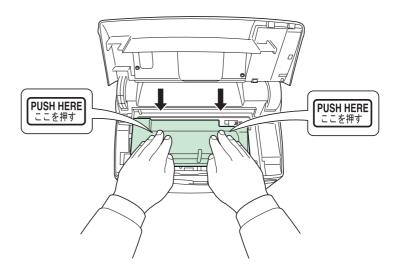
- Take the new toner container out of the toner kit.
- Shake the new toner container at least 10 times as shown in the figure in order to distribute the toner evenly inside the container.



6 Remove the label from the toner container.



7 Set the new toner container in the printer and push down on the top of the toner container to install it firmly in place as shown in the figure below.



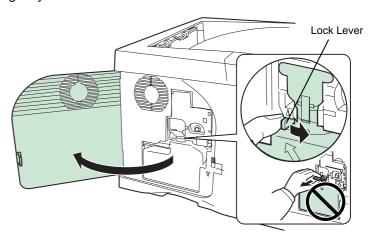
8 Close the top cover.

Proceed to the next section.

## **Replacing the Waste Toner Box**

When replacing the toner container, the used waste toner box in the printer should also be replaced with the new one from the new toner kit. A new waste toner box is included with the toner kit. The printer will not operate without replacing the waste toner box.

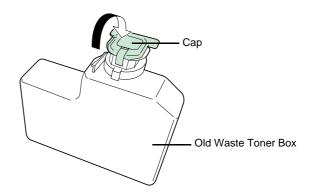
1 Open the left cover. While holding the waste toner box, press the lock lever and then gently remove the waste toner box.



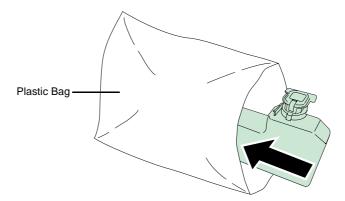
**NOTE:** Remove the waste toner box as gently as possible so as not to scatter the toner inside. Do not let the opening of the waste toner box face downward.

3-6 OPERATION GUIDE

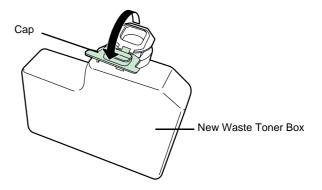
2 Close the cap to the old waste toner box after removing the box from the printer.



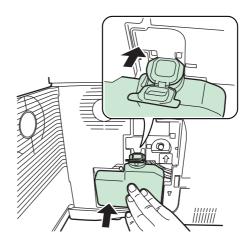
To prevent toner from spilling, put the old waste toner box in the plastic bag (contained in the toner kit) and discard it later according to the local code or regulations for waste disposal.



Open the cap of the new waste toner box.



Insert the new waste toner box as shown in the figure below. When the box is set correctly, it will snap into place.



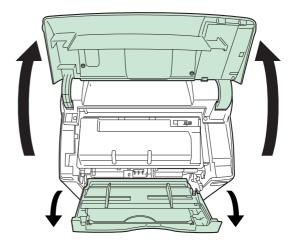
6 Make sure that the waste toner box is correctly inserted and close the left cover.

After replacing the toner containers and the waste toner box, clean the internal parts. For instructions, refer to *Cleaning the Printer on page 3-8*.

# **Cleaning the Printer**

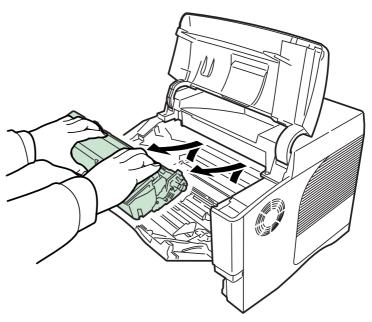
To avoid print quality problems, the interior of the printer must be cleaned.

1 Open the top cover and MP tray.

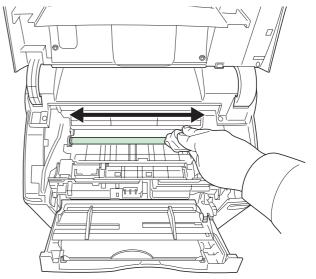


3-8 OPERATION GUIDE

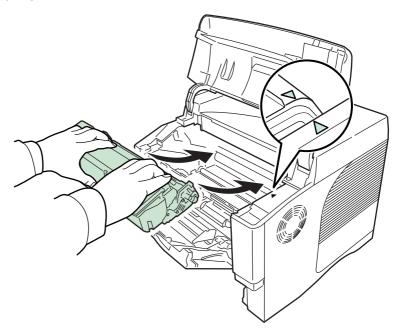
2 Lift the developer unit together with the toner container out of the printer.



3 Use a lint free cloth to clean dust and dirt away from the registration roller (metal).



Insert the developer unit together with the toner container, back into the machine.



5 Close the top cover and MP tray.

3-10 OPERATION GUIDE

# 4 Troubleshooting

This chapter contains explanations on the following topics:

•	General Guidelines	4-2
•	Print Quality Problems	4-3
•	Error Messages	4-5
•	Clearing Paper Jams	4-11

If a problem cannot be corrected, contact your service technician.

#### **General Guidelines**

The table below provides basic solutions for problems you may encounter with the printer. We suggest you consult this table to troubleshoot the problems before calling for service.

Symptom	Check Items	Corrective Action	
Print quality is not good.	Refer to Print Quality Problems on page 4-3.		
Paper is jammed.	Refer to Clearing Paper Jams on page 4-11.		
Nothing lights on the operation panel even when power is turned on and the fan makes no noise.	nen power is turned   properly plugged into the power   the power cord se		
	Check that the power switch is in the On ( ) position.	Set the power switch to the On position.	
The printer prints a status page, but does not print jobs from the computer.	Check the printer cable or the interface cable.	Connect both ends of the printer cable securely. Try replacing the printer cable or the interface cable.	
	Check program files and application software.	Try printing another file or using another print command. If the problem occurs only with a specific file or application, check the printer driver settings for that application.	

#### **Tips**

Printer problems may be solved easily by following the tips below. When you have encountered a problem that following the above guidelines will not solve, try the following:

- Turn the printer power off and wait for several seconds. Then, turn on the printer.
- Reboot the computer which sends the print jobs to the printer.
- Obtain and use the latest version of the printer driver. The latest versions of printer drivers and utilities are available at: http://www.kyoceramita.com/download/.
- Make sure that the procedures for printing are correctly followed in the application software. Consult the documentation supplied with the application software.
- If the printer prints garbage characters or stalls when the computer is turned on, particularly when the printer is connected to the computer under Windows 98 via the parallel port, rename device driver file drvwppqt.vxd. This file may be located in Windows\System\losubsys or Arcada\System folder. For technical details, visit Microsoft web site for the device driver.

4-2 OPERATION GUIDE

# **Print Quality Problems**

The tables and diagrams in the following sections define print quality problems and the corrective action you can conduct to solve the problems. Some solutions may require cleaning or replacing parts of the printer.

If the suggested corrective action will not solve the problem, call for service.

Printed Results	Corrective Action
Completely blank printout	Check the toner container.  Open the top cover and check that the toner container is correctly installed in the printer. For more information on installing the toner container, refer to <i>Toner Container Replacement on page 3-3</i> .
	Check that the application software is correctly operated.
ABC ABC 123	Check the operation panel for toner.  If the Toner low message is displayed, install a new toner kit. To replace the toner container, refer to Toner Container Replacement on page 3-3.
Faint or blurred printing	Check the EcoPrint setting.  When this setting is On, switch it to off on the operation panel.
ABC ABC	Make sure the paper type setting is correct the paper being used.
123 123	Check the operation panel. If the Toner low message is displayed, install a new toner kit. To replace toner, refer to <i>Toner Container Replacement on page 3-3.</i>
ABC	
123	

Printed Results	Corrective Action	
Grey background  ABC	Check the operation panel. If the Toner low message is displayed and the Attention indicator is flashing, install a new toner kit. Refer to <i>Toner Container Replacement on page 3-3</i> .	
123	Check the print density. Display the print density menu from the operation panel and select a lighter density setting.	
Dirt on the top edge or back of the paper	Clean the parts in the paper paths—such as the paper cassette, etc.	
ABC 123 123		
Printing incomplete or out of	Check that the application software is correctly operated.	
ABC	Refer to Tips on page 4-2.	

4-4 OPERATION GUIDE

# **Error Messages**

The following table lists errors and maintenance messages that you can be dealt with by yourself. If Call service appears, turn off the printer, disconnect the power cord, and contact your service technician.

Some errors cause the alarm to sound. To stop the alarm, press [Cancel].

Message	Corrective Action
Add paper MPTray	The paper has run out in the paper source displayed. Supply paper according to the paper source displayed (paper cassettes, MP tray, optional paper feeders, or optional envelope feeder [FS-3900DN/FS-4000DN only]). This message is displayed alternately with messages indicating the printer status, such as, Ready, Please wait, Processing, Waiting, and FormFeed Time Out.
Call service F###	F### represents a controller error (#=0, 1, 2,). Call for service. The printer does not operate when this message is displayed.
Call service ####:0123456	#### represents a mechanical error (#=0, 1, 2,). Call for service. The printer does not operate when this message is displayed. The total number of pages printed is also indicated, e.g. 0123456.
Cassette # not loaded	The corresponding paper cassette is not installed. Install the cassette. The cassette number can be 1 (topmost) to 4 (bottom) [FS-2000D: 1 and 2].
Check waste toner box	This message warns following two cases. Install the new waste toner box. The waste toner box is not installed. The waste toner box is full.
Clean printer Press GO	Please clean the inside of the printer. Refer to Cleaning the Printer on page 3-8. This message will be displayed when replacing the toner container after the message Replace toner is displayed. After cleaning the inside of the printer, press [GO] and the printer will be ready for printing.
Close left cover	The left cover of the printer is open. Close the left cover.
Close rear unit	The rear unit of the printer is open. Close the printer rear unit.
Close top cover	The top cover of the printer is open. Close the printer top cover.
Duplex disabled Press GO	You attempted to print with a paper size and paper type that cannot be used for duplex printing. Press <b>[GO]</b> to print onto one-side of the paper only.

Message	Corrective Action
e-MPS not stored Press GO	The e-MPS job cannot be stored because RAM disk is disabled, RAM disk size is insufficient, Microdrive is not installed, or Microdrive is full. Press <b>[GO]</b> to print error report.
Error.Power off F###	Turn the power switch off and then back on again. If this message still remains, turn the power switch off, and contact your service representative or authorized service center.
File not found Press GO	You have attempted to print a job that is not contained in the specified virtual mailbox, or the specified virtual mailbox is not found.  If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time.
Format error Hard disk	The Microdrive installed in the printer is not formatted, and therefore cannot be read or written.
Format error Memory card	The CompactFlash card inserted in the printer is not formatted, and therefore cannot be read or written.
Hard disk err ## Press GO	A Microdrive error has occurred. Look at the error code given in place of ## and refer to Storage Error Codes on page 4-9. To ignore the Microdrive error, press [GO].
I/F occupied	This message is displayed when you attempt to use the printer's operation panel to change the environmental settings on the interface from which data are presently being received.
ID error	The user ID entered for a private job, or a stored job is not correct. Check the user ID that you specified on the printer driver.
Install MK	Replace Maintenance Kit which is displayed on the message display. Replacement of the maintenance kit is necessary at every 300,000 pages of printing and requires professional servicing. Contact your service technician.
KPDL error ## Press GO	Current print processing cannot continue because of occurrence of KPDL error which is categorized by ##. To print out an error report, display > Print KPDL err(s) from the menu system, and select On. Press [GO] to resume printing. You can abandon printing by pressing [Cancel].  If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time.
Load Cassette # (A4)/(PLAIN) †	The paper cassette matching the paper size and paper type of the print job is empty. Load paper into the paper cassette as displayed in place of #. Press [GO] to resume printing.  If you want to print from a different paper source, press ♠ or ➡ to display Use alternative and you can change the source for paper feeding. After selecting a paper source and pressing [Menu], Paper Handling > appears. By pressing the ♠, the paper type settings menu appears. After setting the correct paper type, press [OK] and printing starts.

4-6 OPERATION GUIDE



Message	Corrective Action
Replace toner Clean printer	Toner has run out in the toner container. Replace the toner container using a new toner kit. The printer does not operate when this message is displayed.
Set paper Press GO	The MP tray is out of paper. Load paper and press <b>[GO]</b> . (Note that feeding the paper having a paper size which does not match the current paper size from the MP tray can cause paper jam.)
Toner low	Toner is running low. Replace the toner container using a new toner kit.
Top tray paper full	The top tray has become full. You must remove all printed pages from the top tray. When the printer detects that the top tray is empty again, the printer will continues printing into the top tray.
Unknown Toner Installed	The toner container is not original. Use of original Kyocera Mita toner kits is highly recommended to prevent printer trouble and ensure the long life of the printer.
USB memory err## Press GO	An USB flash memory error has occurred. Look at the error code given in place of ## and refer to Storage Error Codes on page 4-9. To ignore the USB memory error, press [GO].
USB mem. removed Press GO	The USB flash memory is accidentally removed from the printer. To ignore the USB memory error, press <b>[GO]</b> . The message display returns to Ready.
Virtual mailbox full	The storage area in the Microdrive for the virtual mailboxes is full. Print out accumulated jobs in the virtual mailboxes.
Warning image adapt	Printing job cannot be done in current resolution because there is not enough internal memory. Try adding more memory or changing resolution.
Warning low memory	The printer's internal memory is running low due to too many numbers of fonts and macros downloaded. Try deleting unnecessary fonts and macros.

- † Messages separated by '()/()' are displayed alternately.
- †† After this error has happened, page protect mode will be automatically turned on. To maintain optimum use of memory during printing, we recommend you manually turn off page protect mode.

4-8 OPERATION GUIDE

# **Storage Error Codes**

## **Microdrive Errors**

Code	Meaning
01	Microdrive format error. If this error recurs even if the power has been turned off and then on, reformat the Microdrive.
02	The disk system is not installed. Recheck the requirements for using the system and the devices.
04	There is no available Microdrive space. Delete unnecessary files, etc., in order to free up space.
05	The specified file does not exist in the Microdrive.
06	There is no memory available to the Microdrive system. Increase the available memory.
10	Formatting is not possible because host data is being spooled on the Microdrive. Wait until the Microdrive is ready, and then format.
85	VMB: Alias error. The alias setting was lost, or the virtual tray corresponding to the alias does not exist. Set the alias again.
97	The number of permanent code jobs that can be stored reached the limit value, and no more can be saved. Either delete some unnecessary jobs, etc., or increase the limit.
98	An unreadable page was found in a job (The job is damaged.).
99	A print job for the specified ID does not exist in the Microdrive.

# CompactFlash Card/USB memory Errors

Code	Meaning		
01	The printer does not support the CompactFlash card inserted.		
02	The CompactFlash card is not installed.		
04	The CompactFlash card is full and cannot hold further data. Purge unnecessary files or use a new CompactFlash card.		
05	Specified file is not on the CompactFlash card/USB flash memory.		
06	Insufficient printer memory to support the CompactFlash card system. Expand printer memory.		

## **RAM Disk Errors**

Code	Meaning	
01	Format error. Try turning the power off and on again.	
02	RAM disk mode is Off. Turn RAM disk mode On from the operation panel.	
04	No disk space. Purge unnecessary files.	
05	Specified file is not on disk.	
06	Insufficient printer memory to support the RAM disk system. Expand printer memory.	

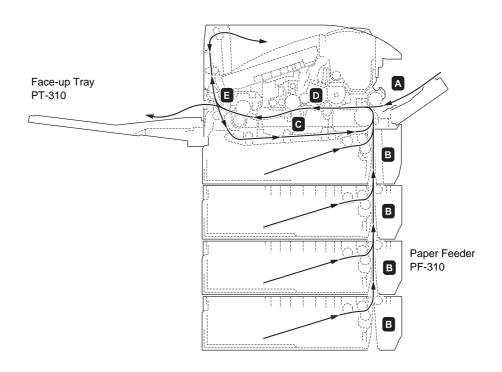
4-10 OPERATION GUIDE

# **Clearing Paper Jams**

If the paper jammed in the paper transport system, or no paper sheets were fed at all, the Paper jam message appears and the location of the paper jam (the component where the paper jam has occurred) is also indicated. The printer automatically goes off-line when this message is displayed. Remove jammed paper. After removing jammed paper, the printer will re-start printing.

## **Possible Paper Jam Locations**

The figure below explains the printer's paper paths including the options. The locations where paper jams might occur are also shown here, with each location explained in the table below. Paper jams can occur in more than one component on the paper paths.



Paper jam message	Paper jam location	Description	Reference page
Paper jam MP Tray  Paper jam EF  Paper jam Bulk Feeder	A	Paper is jammed at the MP tray or optional envelope feeder or bulk paper feeder (if installed [FS-3900DN and FS-4000DN only]).	page 4-13  page 4-16  page 4-16

Paper jam
Cassette 1 (to 4)

В

Paper is jammed at the paper cassette. The cassette number can

## **General considerations for clearing jams**

Bear in mind the following considerations when attempting jam removal:

**CAUTION:** When pulling the paper, pull it gently so as not to tear it. Torn pieces of paper are difficult to remove and may be easily overlooked, deterring the jam recovery.

- If paper jams occur frequently, try using a different type of paper, replace the paper with paper from another ream, flip the paper stack over, or rotate the paper stack 180 degrees. The printer may have problems if paper jams recur after the paper was replaced.
- Whether or not the jammed pages are reproduced normally after printing is resumed depends on the location of the paper jam.

### **Utilizing Online Help Messages**

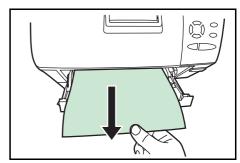
Online help messages are available in the printer's message display to provide simple instructions for clearing jams. Press ( ) when the paper jam message has appeared. Then a help message will appear to facilitate jam clearing in the location.

4-12 OPERATION GUIDE

# **MP Tray**

Paper is jammed at the MP tray. Remove the jammed paper using the procedure given below.

1 Remove the paper jammed at the MP tray.

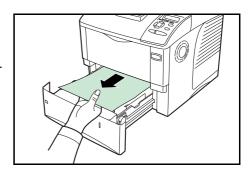


2 Open and close the top cover to clear the error.

# **Paper Cassette**

- Pull out the paper cassette.
- 2 Remove any partially fed paper.

Check to see if paper is loaded correctly. If not, reload the paper.



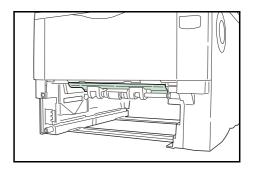
3 Push the paper cassette back in firmly. The printer warms up and resumes printing.

# **Duplexer**

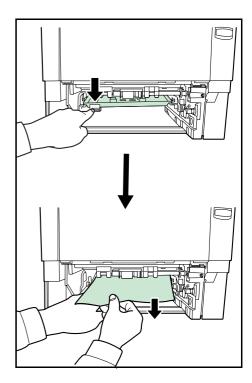
Paper is jammed in the duplex section. Remove the jammed paper using the procedure given below.



**CAUTION:** Do not touch parts in this area, because it may result in burn injury.



- 1 Pull the paper cassette all the way out of the printer.
- Open the duplexer's cover and remove any jammed paper.



Insert the paper cassette into the slot in the printer. The printer warms up and resumes printing.

4-14 OPERATION GUIDE

#### The Inside of Printer

- Open the top cover and MP tray.
- 2 Lift the developer unit together with the toner container out of the printer.

3 Open the feed cover.

4 Remove the paper from the printer.

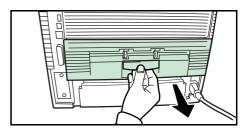
If the jammed paper appears to be pinched by rollers, pull it along the normal running direction of the paper.

**NOTE:** If you cannot find a paper j printer. Refer to *Rear Unit on page* 

Insert the developer unit together with the toner container, back into the machine.

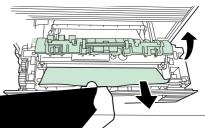
6 Close the top cover and MP tray. T printing.

aper is not completely ejected the output tray, open the rear



the fuser cover and remove mmed paper by pulling it out.

E: If you cannot find a jam, try checking inside at of the printer



is hot. Do not touch it with your

med at optional paper cassette 2 (to 4). Refer to the Suide for the optional paper feeder and remove the jammed

ed at the optional envelope feeder. Remove the jammed e same procedure as for a jam at the MP Tray. Then, open aper transfer unit. For details, refer to the User's Manual for eder.

Βi

at the optional bulk paper feeder. Detach the bulk paper inter by sliding with the rail away from the printer, holding der by both hands. If paper is partially fed out from the paper out by hand.

4-16 OPERATION GUIDE

# **5** Specifications

**NOTE:** Specifications are subject to change without notice.

lt am	Description			
Item	FS-2000D	FS-3900DN	FS-4000DN	
Printing Method	Semiconductor laser and electrophotography			
Printing Speeds - Simplex	A5: 19ppm A4: 30ppm Letter: 31ppm Legal: 26ppm	A6: 21ppm A5: 21ppm A4: 35ppm Letter: 37ppm Legal: 28ppm	A6: 23ppm A5: 23ppm A4: 45ppm Letter: 47ppm Legal: 38ppm	
- Duplex	A4: 15.5ppm Letter: 15.5ppm	A4: 25ppm Letter: 26ppm	A4: 33.5ppm Letter: 34.5ppm	
Paper Sizes - Cassette	A4, A5, B5, Letter, Legal, Folio, Oficio2, Custom (148 x 210 to 216 x 356 mm [5 13/16 x 8 1/4 to 8 1/2 x 14"])	A4, A5, B5, A6, Letter, Legal, Folio, Oficio2, Custom (105 x 148 to 216 x 356 mm [4 1/8 x 5 13/16 to 8 1/2 x 14"])		
- MP Tray	A4, A5, B5, A6, Letter, Legal, Folio, Oficio2, Custom (70 x 148 to 216 x 356 mm [2 3/4 x 5 13/16 to 8 1/2 x 14"])	A4, A5, B5, A6, Letter, Legal, Folio, Oficio2, Custom (70 x 148 to 216 x 356 mm [2 3/4 x 5 13/16 to 8 1/2 x 14"])		
Paper Types - Cassette	Plain, Preprinted, Bond, Recycled, Rough, Letterhead, Color, Prepunched, High quality, and Custom			
- MP Tray	Plain, Transparency, Preprinted, Labels, Bond, Recycled, Vellum, Rough, Letterhead, Color, Prepunched, Envelope, Cardstock, Thick, High quality, and Custom			
Paper Feed Source Capacity - Cassette	500 sheets (80g/m²)			
- MP Tray	100 sheets (80g/m²)			
Output Tray Capacity - Top Tray	250 sheets (80g/m <sup>2</sup> )	500 sheets (80g/m <sup>2</sup> )		
- Face-up Tray (Option)	- PT-310: 250 sheets (80g/m <sup>2</sup> )			

Home	Description			
Item	FS-2000D	FS-3900DN	FS-4000DN	
Warm-up Time (23°C, 50%RH) - Power on	13 seconds or less	15 seconds or less	17 seconds or less	
- Sleep	10 seconds or less	15 seconds or less	15 seconds or less	
First Print Out (A4, 23°C, 60%RH)	19 seconds or less	25.5 seconds or less	24 seconds or less	
Resolution	Fine1200, Fast1200, 600dpi, 300dpi			
Monthly Duty - Average	4,000 pages	8,000 pages	12,000 pages	
- Maximum	150,000 pages	200,000 pages	250,000 pages	
Operating Systems	Microsoft Windows 95/98/Me/2000/XP Microsoft Windows NT4.0 Microsoft Windows Server 2003 Apple Macintosh OS 9 Apple Macintosh OS X			
Controller	PowerPC 440 400MHz	PowerPC 750CXr 400MHz	PowerPC 750CXr 500MHz	
Memory - Standard	64MB		128MB	
- Maximum	576MB		640MB	
Interface - Standard	USB: Hi-Speed USB Full-Speed USB (USB memory slot) Parallel: IEEE1284 KUIO-LV slot	USB: Hi-Speed USB Full-Speed USB (USB memory slot) Parallel: IEEE1284 Network: 10BASE-T/100BASE-TX KUIO-LV slot		
- Option	IB-11: Serial IB-21E/IB-30: 10BASE-T/ 100BASE-TX	IB-11: Serial IB-21E: 10BASE-T/100BASE-TX		
Operation Environment - Temperature	10 to 32.5 °C			
- Relative Humidity	15 to 80 %			
- Altitude	2,500m maximum			
- Illumination	1,500lux maximum			
Dimensions (W x D x H)	382 x 394 x 285mm (15 3/8 x 15 1/2 x 11 1/4")	382 x 394 x 320mm (15 3/8 x 15 1/2 x 12 5/8")		
Weight (without toner container)	15.8kg (33lb)	16.7kg (33 5/16lb)	16.8kg (33 5/16lb)	

5-2 OPERATION GUIDE

ltem	Description			
	FS-2000D	FS-3900DN	FS-4000DN	
Operating noise (in accordance with ISO7779 [Bystander Position,	During printing: LpA = 50dB (A)	During printing: LpA = 52dB (A)	During printing: LpA = 56dB (A)	
sound pressure level at the front])	During standby: LpA = 40dB (A)	During standby: LpA = 40dB (A)	During standby: LpA = 40dB (A)	
	During sleep mode: immeasurably low	During sleep mode: immeasurably low	During sleep mode: immeasurably low	

5-4 OPERATION GUIDE

# QUALITY CERTIFICATE

This machine has passed all quality controls and

#### **Headquarters:**

225 Sand Road,

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TEL: (973) 808-8444 FAX: (973) 882-6000

#### **New York Branch:**

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#### Northeastern Region:

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## **Midwestern Region:**

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#### **Southeastern Region:**

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## Southwestern Region:

2825 West Story Road,

KYO **Postb** Olaf I Norw Phon KYO Slots Denr Phon **KYO** Rua Porti Phor KYO 527 Kyal

Sout Phor ۲D.

KY ∠RICA, INC.

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✓DCERA MITA NEW ZEALAND LTD.

OCERA MITA (THAILAND) CORP., LTD.

OCERA MITA SINGAPORE PTE LTD.

OCERA MITA HONG KONG LIMITED

OCERA MITA TAIWAN Corporation.

YOCERA MITA Corporation

KYOCERA MITA Corporation

KYOCERA MITA Corporation

